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# Machine model

theion

Author: Sami dhiab

Date: 2022-01-03

# Machine model (Model)



machine-class-diagram

## 1. StateManager (Class)

In Machine model

| Attributes |
| --- |
| States : States [1] |

| Operations |
| --- |
| get\_state : Boolean |
| set\_state : Boolean |

| Associations |
| --- |
| Wafer growing Machine \_StateManager - wafer growing Machine : Wafer growing Machine Main Programm [\*] - see [definition](#id-_cGQ3_2yMEeyzq6ra3GZCdA) |

## 2. Wafer growing Machine Main Programm (Class)

In Machine model

| Operations |
| --- |
| execute : retval  - command: String[1] |
| updateStates : retval |

| Associations |
| --- |
| Wafer growing Machine \_StateManager - stateManager : StateManager [1] - see [definition](#id-_AP_FUE7ZEDqhTazy9Yr05Q) |

## 3. float (DataType)

In Machine model

## 4. float2 (DataType)

In Machine model

## 5. retval (Enumeration)

In Machine model

## 6. retval (Enumeration)

In Machine model

* success
* failed

## 7. Communication Management (Package)

In Machine model

### 7.1. Device IDs (Enumeration)

In Machine model::Communication Management

* default id

### 7.2. serialHandler (Interface)

In Machine model::Communication Management

## 8. IR\_temp\_interface (Package)

In Machine model

### 8.1. TempApi (Class)

In Machine model::IR\_temp\_interface

| Attributes |
| --- |
| max\_T : float [1] |
| min\_T : float [1] |

## 9. State Management (Package)

In Machine model

### 9.1. StateManager (Interface)

In Machine model::State Management

| Attributes |
| --- |
| States : States [1] |

| Operations |
| --- |
| get\_state : Boolean |
| set\_state : Boolean |

### 9.2. States (Enumeration)

In Machine model::State Management

* ready
* finished
* pending
* in use
* begin

## 10. hv controll module (Package)

In Machine model

### 10.1. hv\_ac\_Interface (Class)

In Machine model::hv controll module

### 10.2. hv\_dc\_Interface (Class)

In Machine model::hv controll module

## 11. printhead controll module (Package)

In Machine model

### 11.1. Class (Class)

In Machine model::printhead controll module

### 11.2. sysCall\_Handler (Interface)

In Machine model::printhead controll module

| Operations |
| --- |
| Call\_subprocess : retval |

## 12. repetier manager (Package)

In Machine model

### 12.1. CheckIP (Class)

In Machine model::repetier manager

### 12.2. CheckPackage (Class)

In Machine model::repetier manager

### 12.3. Class (Class)

In Machine model::repetier manager

### 12.4. DeltaControl (Interface)

In Machine model::repetier manager

## 13. temperature control module (Package)

In Machine model

### 13.1. (Class)

In Machine model::temperature control module

### 13.2. DeviceCard (Class)

In Machine model::temperature control module

Extends

* TempInterface - see [definition](#id-_cGQ4KWyMEeyzq6ra3GZCdA)

### 13.3. ExtensionBoard (Class)

In Machine model::temperature control module

Extends

* TempInterface - see [definition](#id-_cGQ4KWyMEeyzq6ra3GZCdA)

| Associations |
| --- |
| ExtensionBoard\_Card - cards : TempInterface [\*] - see [definition](#id-_cGQ4KWyMEeyzq6ra3GZCdA) |

### 13.4. TempInterface (Class)

In Machine model::temperature control module

Implements

* serialHandler - see [definition](#id-_FF42kE7UEDqhTazy9Yr05Q)

| Attributes |
| --- |
| temp\_id : Device IDs [1] |

| Operations |
| --- |
| start\_heating |
| stop\_heating |
| set\_temp |
| get\_temp |

| Associations |
| --- |
| ExtensionBoard\_Card - extensionBoard : ExtensionBoard [1] - see [definition](#id-_cGRem2yMEeyzq6ra3GZCdA) |

## 14. up\_down\_controller\_module (Package)

In Machine model

### 14.1. DeltaUpDown (Class)

In Machine model::up\_down\_controller\_module

Implements

* DeltaControl - see [definition](#id-_Z6QugE8CEDqhTazy9Yr05Q)

| Operations |
| --- |
| get\_current\_pos : Integer |
| moveTohome |
| moveTo\_Z\_pos  - Z\_pos: float[1] |